

Reliability Engineer Fundamentals

What You'll Learn

- How to convey the principles and benefits of reliability engineering to others in your organization and lead change
- Equipment Life Cycle planning as it relates to structured maintenance and planned outages
- The importance of Reliability Centered Maintenance (RCM), Failure Reporting and Corrective Action Systems (FRACAS), Delay Analysis, Trending & Statistics
- How to apply measurement techniques to improve the health and management of your assets
- Methods of Root Cause Failure Analysis (RCA) and how to determine which one fits your organization best
- Basic Principles of Predictive Maintenance (PdM)
- Basic Principles of Preventative Maintenance, Inspections and Operator Maintenance
- Human factors in equipment health engineering
- The importance of lubrication and how it relates to asset health

Course Delivery

This course is taught virtually with a live instructor weekly. Private, In-person courses are available on request.



How You'll Learn

This course is designed to teach the principles of reliability engineering and maintenance. It is built to help your organization's Reliability & Maintenance Engineers improve decision-making using tried and true reliability engineering techniques.

At Vertex, we address the growing need to have real-world experiences work together with the knowledge gained in training. For this reason, classroom teaching occurs **once per week for four(4) weeks on a specific day**. Our students are immersed in real-world examples with exercises that go hand-in-hand with their typical day-to-day. These exercises range from effective communication with co-workers to RCAs and more.

Who It's For

- Reliability Engineers
- Maintenance Engineers
- Lead Maintenance Technicians
- Maintenance Managers
- Plant Engineers
- Maintenance Supervisors
- Anyone involved in Reliability and Equipment Strategy



Reliability Engineer Fundamentals

What's Included

- Live Instructor during classroom days
- Weekly one-on-one access to instructor during non-classroom days
- Learning workbook with notes, slides and weekly assignments
- Best Practice Templates for RCA, PdM Criticality & Corrective Actions, Reliability Engineer Reporting and more!

Course Dates

September Cohort #1 (2022) *FULL*
Fridays @ 8am, Beginning Sept. 2

September Cohort #2 (2022)
Fridays @ 8am, Beginning Sept. 30

October Cohort #1 (2022)
Thursday @ 8am, Beginning Oct. 6

November Cohort #1 (2022)
Friday @ 8am, Beginning Nov. 4

November Cohort #2 (2022)
Thursday @ 8am, Beginning Nov. 10

January Cohort #1 (2023)
Thursday @ 8am, Beginning Jan. 13

January Cohort #2 (2023)
Friday @ 8am, Beginning Jan. 14



Course Outline

Week 1

RCM Terminology, Philosophy, Application & Metrics
Data & Statistical Analysis
FRACAS Best Practices
Root Cause Failure Analysis Methodology, Best Practices, Application
Assignment for Wk 2 : Determine RCA Method for organization and use for a failure during the week

Week 2

Planning and Scheduling
Asset Management
Equipment Maintenance Plans
Assignment for Wk 3:

Week 3

PdM Basics
PdM Techniques, Working Together
PM Optimization
Inspection Optimization

Week 4

Lubrication Basics
Leadership
Culture Change Agent
Graduation

Register:

info@vertexreliability.com

469-722-1400

www.vertexreliability.com

